MALAYSIAN STANDARD

MS 2723:2022

Palm methyl esters (PME) diesel vehicle - Laboratory and on-road test procedures

ICS:13.040.50

Descriptors: transport exhaust emissions, testing

© Copyright 2022

DEPARTMENT OF STANDARDS MALAYSIA

Preview Only

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (Standards Malaysia)** is the national standards and accreditation body of Malaysia.

The main function of Standards Malaysia is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. The development of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Section 18A of the act stipulated that, all Malaysian Standards are owned by the Government of Malaysia and no part of a Malaysian Standard can be reproduced in any form without the written permission of the Director General.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia
Level 4 – 7, Tower 2, Menara Cyber Axis,
Jalan Impact, Cyber 6,
63000 Cyberjaya
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 8008 2900
Fax: 60 3 8008 2901
http://www.jsm.gov.my
E-mail: central@jsm.gov.my

Preview Only

Contents

Page

Committee representation ii
Foreword iv
Introduction v
1 Scope 1
2 Normative references 1
3 Terms and definitions 1
4 Abbreviated terms 3
5 Test procedures 3
Bibliography 12

List of Annex

Page

Annex A1: Stage 1: Laboratory test report format (UN Regulation No. 83) - (VTA versus B20) 6
Annex A2: Stage 2: Laboratory test report format (UN GTR 15) – WLTP/MDC laboratory versus real driving emission (RDE) 7
Annex B: Laboratory test report format (UN Regulation No. 49) 8
Annex C: Real driving emission (RDE) test route 10

Preview Only

© STANDARDS MALAYSIA 2022 - All rights reserved

Committee representation

The National Standards Committee on Transport (NSC L) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Agensi Pengangkutan Awam Darat
Department of Environment
Department of Standards Malaysia (Secretariat)
Jabatan Laut Malaysia
Jabatan Pengangkutan Jalan Malaysia
Malaysian Automotive Association
Malaysia Automotive Component Parts Manufacturers Association
Malaysian Institute of Road Safety Research
Malaysia Investment Development Authority
Malaysia Automotive, Robotics and IoT Institute
Ministry of Transport
Ministry of International Trade and Industry
Ministry of Domestic Trade and Consumer Affairs
Motorcycle and Scooter Assemblers and Distributors Association of Malaysia
Perodua Manufacturing Sdn Bhd
Perusahaan Otomobil Nasional Sdn Bhd
Polis Diraja Malaysia
Puspakom Sdn Bhd
Universiti Putra Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Vehicle Powertrain and Fuel System (NSC L/TC 7) which supervised the development of this Malaysian Standard consists of representatives from the following organisations:

Agensi Pengangkutan Awam Darat
Angkatan Tentera Malaysia
Department of Standards Malaysia (Secretariat)
Jabatan Pengangkutan Jalan Malaysia
Malaysia Automotive, Robotics and IoT Institute
Malaysian Automotive Association
Malaysian Institute of Road Safety Research
Motosikal Dan Enjin Nasional Sdn Bhd
Perodua Manufacturing Sdn Bhd
Perusahaan Otomobil Nasional Sdn Bhd
SIRIM QAS International Sdn Bhd
Universiti Teknologi Malaysia

Co-opted members:

Malaysian Palm Oil Board
Motorcycle Zeal Sdn Bhd

The Working Group on Testing Methodology for Biodiesel for Automotive Sector (NSC L/TC 7/WG 4) which developed this Malaysian Standard consists of representatives from the following organisations:

Department of Environment
Department of Standards Malaysia (Secretariat)
Denso (Malaysia) Sdn Bhd
Jabatan Pengangkutan Jalan Malaysia
Malaysia Automotive, Robotics and IoT Institute
Malaysian Automotive Association
Malaysian Biodiesel Association
Malaysian Green Technology and Climate Change Corporation
MIMOS Berhad
Ministry of Transport
Ministry of Works
National Emission Test Centre

© STANDARDS MALAYSIA 2022 - All rights reserved
Preview Only

Committee representation *(continued)*

Perusahaan Otomobil Nasional Sdn Bhd
Perodua Manufacturing Sdn Bhd
Prasarana Malaysia Berhad
Robert Bosch Sdn Bhd
SIRIM QAS International Sdn Bhd
Universiti Teknologi Malaysia (Skudai)

Co-opted members:

Applus+ IDIADA
TUV Rheinland Malaysia Sdn Bhd
Universiti Kuala Lumpur
Universiti Nottingham Malaysia
Universiti Teknikal Malaysia Melaka
Universiti Teknologi Malaysia (Kuala Lumpur)
Universiti Tun Hussein Onn Malaysia

Preview Only

© STANDARDS MALAYSIA 2022 - All rights reserved

Foreword

This Malaysian Standard was developed by the Working Group on Testing Methodology for Biodiesel for Automotive Sector (NSC L/TC 7/WG 4) which reports to the Technical Committee on Vehicle Power Train and Fuel Systems (NSC L/TC 7) under the authority of the National Standards Committee on Transport (NSC L).

Compliance with this standard does not by itself grant immunity from legal obligations.

Preview Only

© STANDARDS MALAYSIA 2022 - All rights reserved